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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,971	09/14/2000	Gautam Bhaskar	CV0293	8921

7590 06/10/2003

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16  
EXAMINER

MENON, KRISHNAN S

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 06/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/661,971

Applicant(s)

BHASKAR ET AL.

Examiner

Krishnan S Menon

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1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 10-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Claims 1-9 and 16-18 are pending in this application. Claims 10-15 were withdrawn from consideration in the previous office action. Applicant need to formally cancel the non-elected claims 10-15.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1-9 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/30304 in view of Lynam (US 5,073,012).

WO (304) discloses an apparatus (instant claim 1-9) and a method (instant claim 16-18) of centrifuging blood or plasma using this apparatus. The apparatus comprises container (10-fig 1) for holding blood, a turn-table for rotating the container (instant claim 1,4) (1-fig1), a halogen lamp (26-fig 1) and an IR heat source (27-fig 1) (instant claim 1,5,6,7,8), temperatures sensors (31,32-fig1) and

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control units (28-fig 1) (instant claim 9), the container having a piston and a cylinder, and the piston dividing the cylinder into upper and lower chambers (instant claim 2), and piston activation means for moving piston (instant claim 3) (page 6). WO(304) also discloses use of polycarbonate for the wall of the centrifuge container (lines 15-24, page 4) for transmitting only visible light and optimizing energy release from the light-emitting source.

WO (304) does not disclose an additional UV filter other than the polycarbonate wall of the centrifuge to filter the UV part of the light emitted by the halogen lamp. Lynam (012) teaches that polycarbonate absorbs UV light below 400 nm (col 8 line 52-col 9 line 11) and the use of UV blockers, filters or screens for protection against UV (col 10: 8-35). It would be obvious to one of ordinary skill in the art at the time of invention to provide a UV filter as taught by Lynam (012) to the halogen lamp as taught by WO(304) to remove the harmful UV light and transmit only visible light for heating the sample which is an alternate but equivalent means of providing light for heating as taught by WO(304) for equivalent function.

2. Claims 1-9 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/30304 in view of Wollowitz et al (US5,593,823).

WO (304) discloses an apparatus (instant claim 1-9) for centrifuging blood or plasma. The apparatus comprises container (10-fig 1) for holding blood, a turn-table for rotating the container (instant claim 1,4) (1-fig1), a halogen lamp (26-fig 1) and an IR heat source (27-fig 1) (instant claim 1,5,6,7,8), temperatures sensors (31,32-fig1) and control units (28-fig 1) (instant claim 9), the container having a piston and a cylinder, and the piston dividing the cylinder into upper and lower chambers (instant claim 2), and piston activation means for moving piston (instant claim 3) (page 6). WO(304) also discloses use of polycarbonate for the wall of the centrifuge container (lines 15-24,

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page 4) for transmitting only visible light and optimizing energy release from the light-emitting source.

WO (304) also teaches a method of centrifuging blood or plasma using this apparatus as in instant claims 16-18.

WO (304) does not teach having a filter placed between the wall of the container and the light-emitting source for filtering substantially radiation in the range of 190-400 nm. Wollowitz (823) teaches the use of such filters to remove radiations of specific wavelengths between a blood containing means and a heat source (see fig 6 and col 26 lines 9-16). It would be obvious to one of ordinary skill in the art at the time of invention that a filter could be placed between the wall of the container and the heat source to make sure that any unwanted radiation wavelengths are filtered from the heat-emitting source as taught by Wollowitz (823) and the radiation hitting the blood sample could be tailored to certain specific wavelengths.

### *Response to Arguments*

Applicant's arguments filed on 11/18/02 have been fully considered but they are not persuasive.

Applicant argues that the secondary references Lynam and Wollowitz do not rectify the deficiencies of WO '304. WO 304 has provided a polycarbonate container and teaches that it transmits only visible light (lines 15-24, page 4). Lynam reference is used as support to show that polycarbonate material filters the UV radiation, which the applicant agrees. That is the only purpose of Lynam reference. Wollowitz teaches deactivating pathogens in blood, which requires radiation of specific wavelengths,, and provides filters to that effect. Wollowitz is used to show that it is known

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to one skilled in the art to provide filters for filtering/tailoring the wavelength of radiation to suit the requirements.

Re argument that Lynam nor Wollowitz suggest modifying WO'304: this is not relevant. WO'304 suggests using only visible light, and by doing so implies that UV radiation is avoided (page 4 lines 15-24). Radiation of 190-400 nm is known as the UV range of radiation.

Re the argument of exceptional results from the data: The experiment does not identify and discriminate all other influential factors. At least two factors are identified as having an effect in the experiment, filtering UV light and exogenous thrombin. The % FPB (last col of table 2) show only 3/6 pairs (50%) show an increase in %FPB with UV filter, which cannot be considered as a marked increase. 3/6 sample pairs have exogenous thrombin, and all of them showed consistent and significant increase in the %FPB. The data seems to be more appropriate to show the effect of exogenous thrombin. (Examiner assumes that with and without UV filter in the experiment implies with/ without additional UV filter and the centrifuge container used is made of polycarbonate).

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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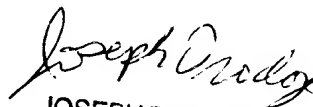
calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krishnan S Menon whose telephone number is 703-305-5999. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Krishnan Menon  
Patent Examiner  
June 6, 2003

  
JOSEPH DRODGE  
PRIMARY EXAMINER